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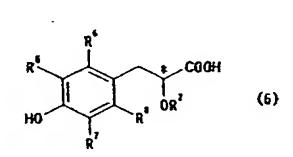
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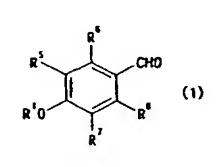
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(54) Title: PROCESS FOR PRODUCING OPTICALLY ACTIVE 3-(4-HYDROXYPHENYL)PROPIONIC ACIDS





$$R^2O$$
 $COOR^3$ (2)

(57) Abstract: The present invention relates to a process for producing an optically active 3-(4-hydroxyphenyl)propionic acid useful as intermediates for medicines, through short steps in good yield and with high optical purity. More specifically, the present invention relates to a process for producing an optically active 3-(4-hydroxyphenyl)propionic acid of the formula (6): wherein R² is an alkyl group; R⁵ to R⁵ are each independently a hydrogen atom or a substituent; and the symbol * is an chiral carbon atom, or a salt thereof, which comprises reacting a benzaldehyde of the formula (1): wherein R¹ is a protective group; and R⁵ to R⁵ are each the same as defined above, with a glycolic acid derivative of the formula (2): wherein R³ is a hydrocarbon group; and R² is the same as defined above, hydrolyzing the resulting product to give a cinnamic acid of the formula (4): wherein R¹, R² and R⁵ to R⁵ are each the same as defined above, or a salt thereof, and subjecting the resulting cinnamic acid (4) or a salt thereof to asymmetric hydrogenation to give an optically active phenylpropionic acid of the formula (5): wherein all the symbols are each the same as defined above, or a salt thereof, followed by deprotection.

$$\begin{array}{c|c}
R^5 & COOH \\
R^1O & R^2 & OR^2
\end{array}$$
(4)

$$R^5$$
 R^6
 R^6
 R^8
 R^8



CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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